

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 1662.004WO1	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US03/40806	International filing date ( <i>day/month/year</i> ) 19 December 2003 (19.12.2003)	(Earliest) Priority Date ( <i>day/month/year</i> ) 20 December 2002 (20.12.2002)
Applicant NATIONAL INSTITUTES OF HEALTH		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the Report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found **unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures

Form PCT/ISA/210 (first sheet) (July 1998)

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/40806

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>																						
IPC(7) : C12Q 1/04; C12N 1/00, 1/20, 1/36, 1/38, 13/00; G01N 33/536, 33/539, 33/566																						
US CL : 435/34, 173.4, 243, 244, 245, 253.6; 436/501, 536, 539																						
According to International Patent Classification (IPC) or to both national classification and IPC																						
<b>B. FIELDS SEARCHED</b>																						
Minimum documentation searched (classification system followed by classification symbols)																						
U.S. : 435/34, 173.4, 243, 244, 245, 253.6; 436/501, 536, 539																						
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Please See Continuation Sheet																						
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet																						
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>																						
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																				
Y	US 6,136,554 A (BOCHNER) 24 October 2000 (24.10.2000). Entire document, especially Abstract., Tables 1-4, Column 19, Lines 13 to Column 22, Line 58; Column 24, Line 8 to Column 27, Line 50.	1-61																				
Y	US 6,379,918 B1 (FELDSINE et al.) 30 April 2002 (30.04.2002). Entire document, especially abstract; Column 3, Line 53 to Column 5, Line 39 and Claims 1-25.	1-61																				
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																						
* Special categories of cited documents: <table border="0"> <tr> <td>"A"</td> <td>document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E"</td> <td>earlier application or patent published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table>			"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family	"P"	document published prior to the international filing date but later than the priority date claimed		
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"P"	document published prior to the international filing date but later than the priority date claimed																					
Date of the actual completion of the international search		Date of mailing of the international search report																				
01 February 2005 (01.02.2005)		18 FEB 2005																				
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Dr. Kailash C. Srivastava Telephone No. (571) 272-1600																				

Form PCT/ISA/210 (second sheet) (July 1998)

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**Continuation of B. FIELDS SEARCHED Item 2:**

EATON ET AL., 1995, STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. 19TH EDITION. AMERICAN WATER WORKS ASSOCIATION/ AMERICAN PUBLIC HEALTH ASSOCIATION.

**Continuation of B. FIELDS SEARCHED Item 3:**

DWPI, EPAB, JPAB, PGPB, USOC, USPT, ADISNEWS, AGRICOLA, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, DISSABS, EMBAL, EMBASE, ESBIODBASE, FEDRIP, FROSTI, FSTA, HCAPLUS, HEALSAFE, IFIPAT, JICST-EPLUS, KOSMET, LIFESCI, MEDICONE, MEDLINE, NTIS, PROMPT, RDISCLOSURE, REGISTRY, SCISEARCH, TOXCENTER, USPATFULL, WPIDS.

**Search Terms:**

Escherichia coli, enteropathogenic, toxigenic, pathogenic, enterohemorrhagic, hemorrhagic, enterotoxigenic, bacteria, acidic, selective, culture media, nutrients, pH 1-6, 2-4, 1-4, sorbitol or "RN-50-70-4", selenite or "RN-15698-85-8", tellurite or "RN-37368-05-2", pH or hydrogen ion concentration, identif?, isolat?, identif?, recogniz\$/?, SOB medium, LB, BHI, brain heart infusion, tryptoy broth or TSB, NZCYM, RIA or radioimmunoassay, ELISA, antibody assay.